

21.6% pt in normal troponin T group had poor outcome (P value 0.0146). After 30 days follow up 50% pt died in elevated troponin group while only 13.5% pt died in normal troponin group (P value 0.0389).

**Conclusion:** In patients of acute ischemic stroke with raised troponin T level there was increased morbidity (P value 0.0146) and mortality (P value 0.0146) which was found to be statistically significant.

### Rates of hemorrhage during warfarin therapy for atrial fibrillation

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**Background:** Although warfarin has been extensively studied in clinical trials, little is known about rates of hemorrhage attributable to its use in routine clinical practice. Our objective was to examine incident hemorrhagic events in a municipal hospital based cohort of patients with atrial fibrillation who were started treatment with warfarin.

**Methods:** We conducted a municipal hospital based cohort study involving patients (age  $\geq 50$  yr) with atrial fibrillation who started taking warfarin between Jan 2013, and March 2014. We defined a major hemorrhage as any visit to hospital for hemorrhage. We determined crude rates of hemorrhage during warfarin treatment, overall and stratified by CHADS 2 score (congestive heart failure, hypertension, age  $\geq 75$  yr, diabetes mellitus and prior stroke, transient ischemic attack or thromboembolism).

**Results:** We included 469 patients with atrial fibrillation who started treatment with warfarin during the study period. Overall, the rate of hemorrhage was 3.5% (95% confidence interval [CI] 3.8%–3.9%) per person-year. The risk of major hemorrhage was highest during the first 30 days of treatment. During this period, rates of hemorrhage were 11.6% (95% CI 11.1%–12.5%) per person-year in all patients and 15.6% (95% CI 14.3%–19.4%) per person-year among patients with a CHADS 2 scores of 4 or greater. Over the 13 months follow-up, 38 patients (8.1%) visited the hospital for hemorrhage; of these patients, 2 (5%) died in hospital.

**Conclusions:** In this municipal hospital based cohort of older patients with atrial fibrillation, we found that rates of hemorrhage are highest within the first 30 days of warfarin therapy. These rates are considerably higher than the rates of 1%–3% reported in randomized controlled trials of warfarin therapy. Our study provides timely estimates of warfarin-related adverse events that may be useful to clinicians, patients and policy-makers as new options for treatment become available.

### Experience of pulmonary embolism at J.J.hospital

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**Background:** It is said pulmonary embolism is “a great imitator”. It can present with different characteristics which can vary from patient to patient in young vs elderly patients. Pulmonary embolism (PE) is a blockage of the main pulmonary artery or one of its branches by a substance that has travelled from elsewhere in the

body through the bloodstream. PE most commonly results from deep vein thrombosis.

Symptoms of pulmonary embolism include dyspnea, tachycardia, tachypnea, chest pain, palpitations, cyanosis, hypotension, and sudden death. Diagnosis is based on these clinical findings and imaging studies, usually CT pulmonary angiography. Treatment is typically with anticoagulation. Severe cases may require thrombolysis or may require catheter based intervention via pulmonary thrombectomy.

**Objective:** The purpose of this study is to assess frequency, risk factors, presenting symptoms, treatment, complications and In-hospital outcomes of pulmonary embolism in young patients compared with those of elderly patients.

**Methods:** We studied 18 patients of pulmonary embolism in < 40 years age group and 20 patients age more than 40 years admitted in our hospital from August 2012 to July 2014. Patients with a diagnosis of pulmonary embolism admitted to between January 2012 and January 2014 were included in this study. A diagnosis of pulmonary embolism was based on: chest pain, electrocardiographic changes 2 D ECHO, D dimer, and typical time related pattern of ABG, ECG, CT Pulmonary angiography and response to treatment.

**Results:** Breathlessness was the most common presentation in 30 patients (78.92%), while chest pain in 6 patients (15.2%) and hypotension in 2 patients (5.7%). Incidence of pulmonary embolism is exceedingly higher in males (78.92%) compared to females. Typical symptoms seen in 70%. Risk factors such as prolonged bed rest, immobilisation levels are more common in elderly patients, whereas family history (22.10%) and diabetes (11.59%) are less frequent. Prevalence of chest pain is almost same in younger (76.81%) and elderly (78.6%) age group, most common sign being tachypnea. 74.25% of young patients with pulmonary embolism received treatment in form of thrombolysis, most of the patients (85%) received streptokinase, 15% patients received tenecteplase.

4 patients received intrapulmonary thrombolysis with guidance of catheter in PA.

Total 5 patients died, most of due to refractory hypotension. 2 patients developed chronic pulmonary thromboembolism. Elevated serum homocysteine levels are seen in 28 (10.14%) of young patients. Primary thrombolysis had good outcome in < 40 years age group. Postprocedure complications are almost negligible (< 3%) in young age group. The incidence of in-hospital congestive heart failure, and major bleeding were lowest (< 2%) in the youngest age group.

**Conclusion:** Younger patients have better outcome as compared to elderly patients.

### Tenecteplase in postoperative acute pulmonary thromboembolism

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**Background:** The Incidence of Acute pulmonary thromboembolism, as one of the post operative fatal complications, is around 1.6%. Management of embolism in postoperative cases is always difficult and thus leading onto high rates of mortality and poor prognosis. According to ESC guidelines, the use of Tenecteplase is an important determining factor in the prognosis and

management, with absolute contraindication for early post operative cases ie. within 3 weeks. No large randomized trials have been reported in postoperative cases of pulmonary thromboembolism till date.

**Aim:** This retrospective study was aimed to evaluate the use of Tenectapase in postoperative cases of acute pulmonary thromboembolism.

**Methods:** Ten post operative cases of acute pulmonary thromboembolism, confirmed by CT pulmonary angiography, in which Tenectapase (Velix) was the drug of choice for thrombolysis were selected (with their high risk consent). Electrocardiography, RV dysfunction by 2D echocardiography and clinical conditions such as tachypnea, hypotension and oxygen saturation were measured and analyzed statistically.

**Results:** Initially all patients were tachypneic of which 50% had hypotension and 9/10 had hypoxia. Thrombolytic treatment with single intravenous bolus of Tenectapase (30/40 mg) could significantly ( $p < 0.0001$ ) improve RV function. Improvement in hypotension was observed in 3/5 cases, whereas 1/9 failed to improve hypoxia. Only 1/10 case expired due to intracranial hemorrhage immediately after thrombolysis. In one case, Tenectapase was given intra-arterial but the patient died after few days after IC bleed.

**Conclusion:** Early diagnosis and treatment of pulmonary embolism with potent thrombolytics can be life saving. Though this study was conducted in small sample population for a short duration the result of this study concluded that Tenectapase can be a potent thrombolytic agent which can be used as drug of choice in postoperative cases of acute pulmonary thromboembolism with high consent. But its potential complication and risk factors should be managed promptly.

## Reappraisal of temporal dispersion of arrhythmias in acute myocardial infarction after thrombolysis in initial 24 hours of presentation

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**Background:** Temporal dispersion of electrical instability events and hemodynamically significant arrhythmias in myocardial infarction (MI) after thrombolysis is not fully established.

**Methods:** Temporal dispersion of electrical instability events and hemodynamically significant arrhythmias was assessed using 24 hour holter recording in 200 patients of myocardial infarction (MI) presenting within 2 hours.

**Results:** Anterior wall MI had higher incidence of nonsustained ventricular tachycardia and ventricular ectopy with marked decrease in beat to beat (BB) variability, predisposing this group for malignant arrhythmias. Inferior wall MI showed more bradyarrhythmic events and higher BB variability ( $P$  value  $< 0.05$ ). Electrical instability after MI predominates in the first 8-10 hours ( $P$  value  $< 0.05$ ) and tends to subside thereafter.

Ventricular ectopy, tachyarrhythmia events, bradyarrhythmia and beat to beat variability in myocardial infarction during first 24 hour of presentation.

**Conclusions:** Despite the burgeoning increase in the number of MI patients in coronary care units, vigilant monitoring is recommended at least during this vulnerable period.

Characteristics	AWMI (n=86)	IWMI (n=95)	LWMI (n=27)
Total Burden of hemodynamic significant tachyarrhythmia	7 (8.5%)	6 (7.6%)	2 (7.7%)
1st quartile(0-6 hr) (% of total tachyarrhythmia episode)	78%	82%	84%
2nd quartile(7-12 hr) (% of total tachyarrhythmia episode)	13%	12%	12%
3rd quartile(13-18 hr) (% of total tachyarrhythmia episode)	5%	3%	3%
4th quartile(19-24hr) (% of total tachyarrhythmia episode)	4%	3%	1%
Nonsustained VT	51 (62)	50 (57)	12 (46)
Sustained VT	8 (9.3%)	5 (5.2%)	1 (3.8%)
Ventricular fibrillation	3 (3.6%)	3 (3.3%)	1 (3.8%)
Time to onset of 1st hemodynamic significant arrhythmia	2.2±1.1hr	2.6±1.2	2.6±1.3hr
SVT/VT/VF/polymorphic VT			
Burden of VE in 24 hr (% of total RR complexes) <sup>§</sup>	13%	3.2%	2.6%
Burden of VE in 1st quartile(0-6 hr) (% of total VE)	61%	64%	73%
Burden of VE in 2nd quartile(7-12 hr) (% of total VE)	31%	28%	23%
Burden of VE in 3rd quartile(13-18 hr) (% of total VE)	5%	6%	4%
Burden of VE in 4th quartile(19-24hr) (% of total VE)	3%	2%	0%
Number of patients with bradyarrhythmia	5(6.1)	19(20.6)	1(3.8)
Bradycardia burden (bradycardia complexes as % of total RR complexes)			
1st quartile(0-6 hr)	-	56	22
2nd quartile(7-12 hr)	-	32	8
3rd quartile(13-18 hr)	-	18	3
4th quartile(19-24hr)	-	6	3
Beat to Beat RR variability(% RR>50)	7.2%	22.3%	14.8%
Beat to Beat RR variability(Magid SD) in milliseconds	40±8	50±36	54±11
Beat to Beat RR variability(Kleiger SD) in milliseconds	49±9	83±25	56±18
Beat to Beat RR variability(RMS-SD) in milliseconds	22±7	82±10	28±12